

(19)



JAPANESE PATENT OFFICE

## PATENT ABSTRACTS OF JAPAN

Vorlage	Ablage	P 740
Haupttermin		
Eing.: 24. APR. 2003		
PA. Dr. Peter Rilling		
Bearb.:	Vorgelegt.	

(11) Publication number: **2001132738 A**(43) Date of publication of application: **18.05.01**

(51) Int. Cl. **F16C 17/10**  
**F16C 33/14**

(21) Application number: **11311933**(22) Date of filing: **02.11.99**(71) Applicant: **SEIKO INSTRUMENTS INC.**

(72) Inventor: **OKI SHIGERU**  
**YAMAMOTO TETSUO**

(54) **METHOD OF ASSEMBLING SHAFT WITH  
FLANGE AND FLUID DYNAMIC PRESSURE  
BEARING**

(57) Abstract:

**PROBLEM TO BE SOLVED:** To assemble a shaft with flange by press fitting a ring member into a cylindrical member with accurate perpendicularity, to improve stability in high-speed rotation of a fluid dynamic pressure bearing basically composed of the shaft with flange and a sleeve receiving the same, and to realize the long service life.

**SOLUTION:** This method of assembling a shaft 1 with flange comprises (A) a stage for inserting and setting a cylindrical member 2, having a cylindrical part 2b and a tapered cylindrical part 2a of a very small inclination angle having a diameter reduced continuously from the cylindrical part 2b to one end part, into a guide jig 6 having a tapered cylindrical part 6a of very small inclination angle same as that of the tapered cylindrical part 2a, and (B) a stage for press fitting a ring member 3 to the cylindrical member 2 to a prescribed position of the

cylindrical part 2b. Finally, the guide jig 6 is taken out of the cylindrical member 2 to complete the assembling of the shaft 1 with a flange.

COPYRIGHT: (C)2001,JPO

